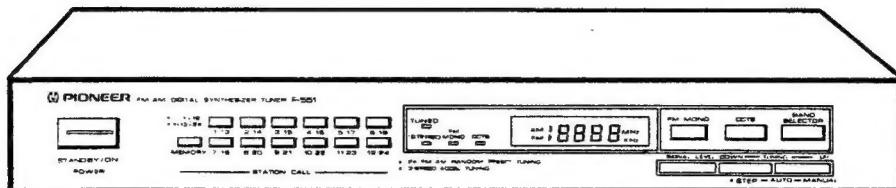


**Operating Instructions**  
**Bedienungsanleitung**  
**Mode d'emploi**  
**Istruzioni per l'uso**

FM/AM DIGITAL SYNTHESIZER TUNER  
 DIGITALER UKW/MW-SYNTHESIZER-TUNER  
 SYNTONISEUR SYNTHESISEUR A AFFICHAGE  
 NUMERIQUE FM/AM  
 SINTONIZZATORE FM/AM DIGITALE SINTETIZZATO

**F-551L**  
**F-551**

Model designed exclusively for use in Italy/  
 Modello progettato esclusivamente per l'Italia



- The illustration shows the model F-551.

Thank you for buying this Pioneer product.  
 Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.  
 In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD,  
 DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

**IMPORTANT NOTICE**

[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]

**CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

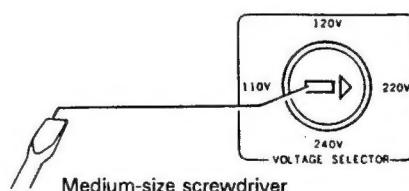
**ATTENTION:** POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

**LINE VOLTAGE SELECTOR SWITCH**

Only multi-voltage models are provided with this switch. U.S., Canadian, European, U.K., and Australian models are not provided with this switch.

The line voltage selector switch is on the rear panel. Before your model is shipped from the factory, this switch is set to the power requirements of the destination. Check that it is set properly before plugging the power cord into the AC outlet. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switch as follows.

1. Use a medium-size screwdriver.
2. Insert the screwdriver into the groove on the voltage selector, and adjust so that the tip of the arrow points to the voltage value of your area.



**CONTENTS**

Features .....	3
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Presetting FM and AM (MW or LW) Stations .....	6
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**ENGLISH**

**DEUTSCH**

**FRANÇAIS**

**ITALIANO**

**PIONEER®**



# FEATURES

## CCTS (Computer Controlled Tuning System) tuning for optimum sound quality

- Reduces tracking errors when you are receiving FM and AM broadcasts.
- Auto high blend ensures optimum stereo reception at all times.
- Provides a digital indication of the electric field strength of the received broadcast.

## Random 24-stations presetting

### Model F-551

A total of 24 FM and AM stations can be preset into the memory circuit.

### Model F-551L

A total of 24 FM, MW and LW stations can be preset into the memory circuit.

ENGLISH

# CHECKING THE ACCESSORIES

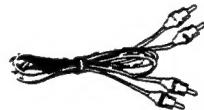
AM loop antenna ..... 1



FM T-type antenna ..... 1



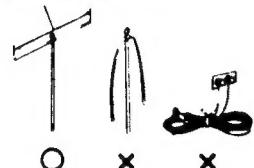
Connection cord with pin plugs ..... 1



# CONNECTIONS

- Use for FM reception until a special-purpose FM antenna is installed.
- Stretch both ends taut and affix to a wall, etc.

Stretch taut and affix.

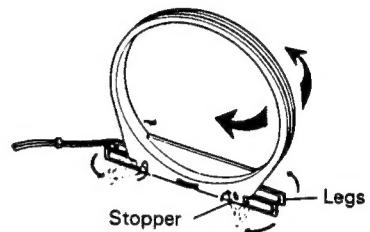


Accessory FM T-type antenna

Outdoor FM antenna

## AM LOOP ANTENNA

- Unfold all four legs of the AM loop antenna toward the outside, and insert the stopper inside the legs into the hole in the AM loop antenna to fix it in position.
- Set the antenna on a level surface, and point in the direction that gives optimum reception.
- Do not install the antenna in locations where it touches the cover of the unit or other metal objects, or near a CD player, personal computer, or television set.

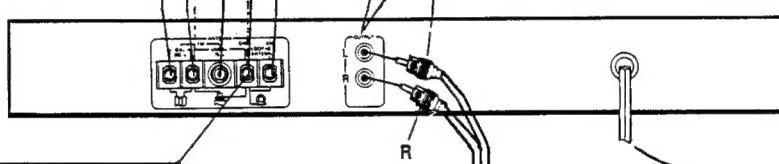


### CONNECTING THE FM T-TYPE ANTENNA AND AM LOOP ANTENNA



1. Strip the end of the wires.
2. Wrap the end of the wire in a clockwise direction around the base of the terminals and tighten the terminals to secure.

The OUTPUT jacks of this unit are dull tin-plated, aiming at high audio quality.



### Antenna ground

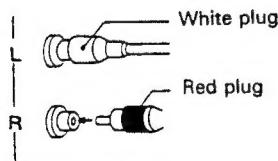
Although grounding is not always necessary for reception, it is recommended for protection against damage from lightning if an outdoor FM antenna is used. Grounding is recommended as well to help reduce noise and hum.

#### NOTE:

*Never make the ground connection to a gas pipe as sparks could cause the gas to ignite.*

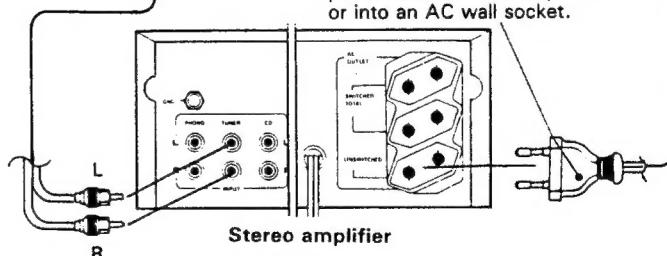
### Pin plug connecting cord

- Connect the white plug to the white terminal (L) and the red plug to the red terminal (R).
- Make sure that there is a proper connection.



### Connecting the power cord

Plug the power cord into (UNSWITCHED) the auxiliary power outlet on the amplifier or into an AC wall socket.



# FRONT PANEL FACILITIES

## POWER switch

When this switch is set to the on position, power is supplied to the tuner's main circuits. The POWER unit's switch is geared to selecting the transformer's secondary so that even in stand-by position, the unit's circuitry will work as long as the power cord is connected to a power outlet. Disconnect the power cord from the power outlet when you do not plan to use the unit for a long period of time.

**NOTE:**

*The memory will be backed up so long as the power cord is not unplugged.*

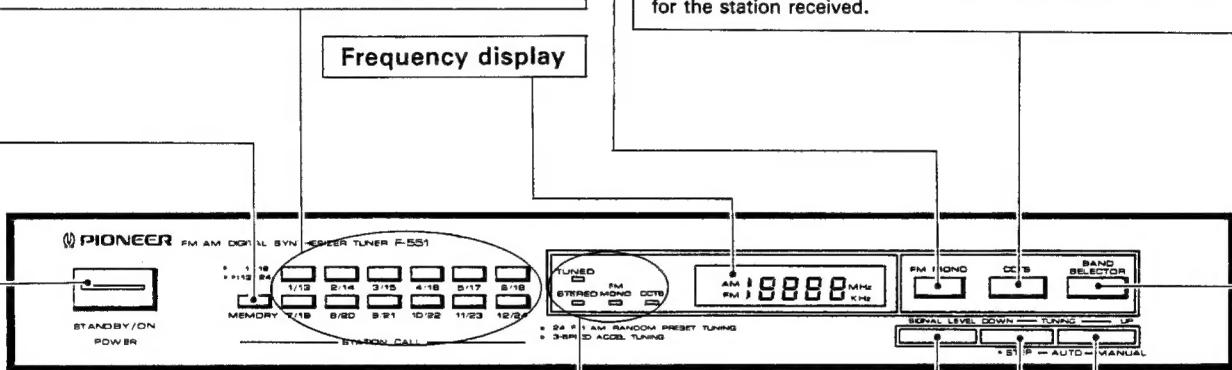
*If the power cord is unplugged, the memory will be retained for several days.*

## MEMORY switch

This is used to memorize stations. When the switch is pressed, the frequency indication on the frequency display flashes. To memorize the frequency of any station, press the STATION CALL switch while the frequency indication on the frequency display flashes.

## STATION CALL switches

These are used to preset and recall broadcasting stations.



- Illustration shows model F-551.

## Operation indicators

a TUNED indicator

This lights up to indicate when the finest tuning of a station has been achieved.

b STEREO indicator (FM)

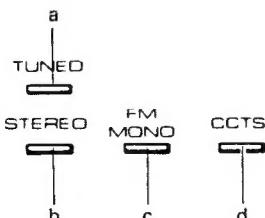
This lights when a stereo program has been picked up during an FM broadcast reception.

c FM MONO indicator

This lights up when the FM MONO switch is pressed.

d CCTS indicator

This lights up when the CCTS switch is pressed.



## FM MONO switch

Normally, when receiving an FM stereo broadcast, leave this switch OFF. If the broadcast station is distant, or if you are in a poor reception area, the input signals will be weak, and during stereo reception, noise will be prominent, making the broadcast difficult to hear. In such a case, press ON this switch. The broadcast will be reproduced in monaural, however noise will be reduced, enabling the broadcast to be heard more clearly.

**NOTE:**

- This switch does not function when you are listening to an AM (MW or LW) broadcast.
- The ON or OFF status of the FM MONO switch will be memorized when you preset a station in the STATION CALL switch. By using the PRESETTING FM AND AM (MW or LW) STATIONS function, you can receive an FM broadcast at any time in the same mode.

## CCTS switch

### (Computer controlled tuning system)

When this switch is set to ON (the CCTS indicator lights), the unit's built-in microcomputer automatically performs the optimum tuning for the station received.

ENGLISH

## BAND SELECTOR switch

Each time this switch is pressed, FM, AM (MW or LW) reception is selected alternately.

FM and MHz light: FM reception.

AM and kHz light: AM (MW or LW) reception.

## TUNING switches (DOWN, UP)

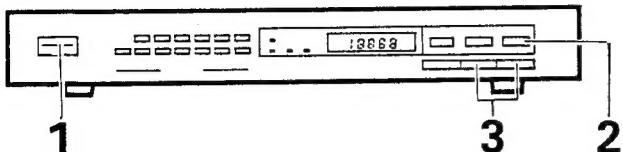
These are used to locate stations. Push the "DOWN" switch to locate a station broadcasting on a lower frequency and the "UP" switch to locate a station broadcasting on a higher frequency.

## SIGNAL LEVEL switch

When this switch is pressed, the frequency display will show a digital number "0" — "9". The size of the number corresponds to the strength of the received signal, "9" representing the strongest, and "0" when there is no signal. In this way, this function can be used when installing an antenna to allow orientation of the antenna for optimum reception.

# LISTENING TO BROADCASTS

Listening to FM or AM (MW or LW) broadcasts.



- 1 Press the POWER switch to ON.
- 2 Use the BAND SELECTOR switch to select either the FM or AM (MW or LW) reception band.
  - For FM broadcasts, the "FM" and "MHz" indicators will light.
  - For AM (MW or LW) broadcasts, the "AM" and "kHz" indicators will light.
- 3 Press the "DOWN" or "UP" side of the TUNING switch.  
 [When the CCTS switch is ON:]  
  - When a station is tuned in, the level indicator will indicate the receiving level for several seconds, then indicate the frequency once again.

Auto tuning:



Press the tuning switch until the frequency starts to change, then release it.

The tuner will automatically search for a broadcasting station, and stop when one is found. To search for another station, press again.

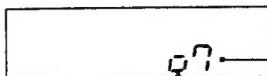
- To interrupt auto tuning, press the TUNING switch.

**NOTE:**

When you press ON the CCTS switch and then receive an FM stereo broadcast using AUTO tuning, the Hi-Blend will not be applied to the audio for several seconds. This is because the computer is searching for the best reproduction condition.

## CCTS function

When you press ON the CCTS switch, the internal computer will search for the best tuning point. During this search operation, no sound will be emitted.



Segments "rotate" while the computer is searching for the best tuning point.

## Manual tuning:



Press and release quickly.

The tuning frequency will change by one step each time the switch is pressed. Press as many times as necessary to tune in the desired station.

- If the switch is held depressed, the reception frequency will change continuously, and stop when the switch is released.

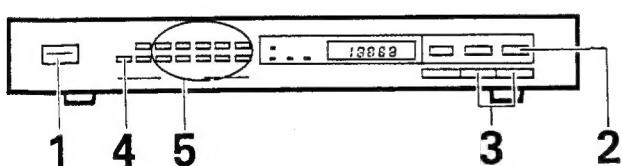
- 4 When you wish to receive a different station within the same band, repeat step 3. To receive a station on a different reception band, repeat steps 2 and 3.

- 5 Adjust the volume and tone of the stereo amplifier.

## NOTE:

When AUTO TUNING is in use, reception may not be possible over long distances or when signals are weak. At these times MANUAL TUNING is recommended.

## PRESETTING FM AND AM (MW or LW) STATIONS



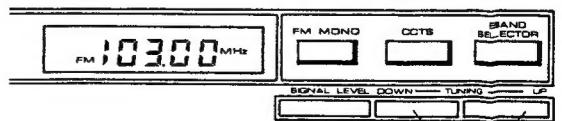
You can preset 12 FM and AM (MW or LW) stations in Mode 1 (1 — 12), and 12 stations in Mode 2 (13 — 24), that is a total of 24 stations.

- 1 Press the POWER switch to ON.
- 2 Use the BAND SELECTOR switch to select either the FM or AM (MW or LW) reception band.
  - For FM broadcasts, the "FM" and "MHz" indicators will light.
  - For AM (MW or LW) broadcasts, the "AM" and "kHz" indicators will light.

- 3 Use the TUNING switch to tune in the desired station.

- When presetting a broadcast station, if you think that the time taken to tune into a station while the CCTS switch is left ON is too long, turn the CCTS switch OFF.

When memorizing an FM station, either press the FM MONO switch to forcibly memorize the station in the monaural mode, or memorize the station in the auto stereo mode (with FM MONO switch left in the OFF position).



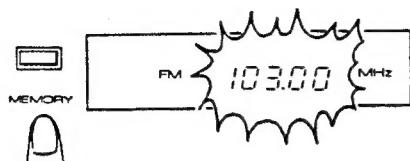
When FM 103.00 MHz is received.



## PRESETTING FM AND AM (MW or LW) STATIONS

### 4 Press the MEMORY switch.

- The display will flash (about 10 seconds).

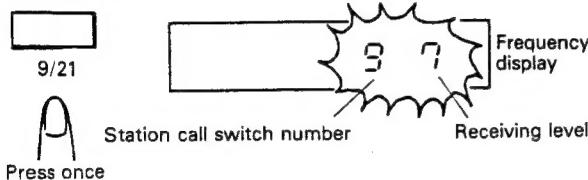


### 5 Press the STATION CALL switch

- While the display is flashing, press the switch corresponding to the station which you wish to preset or re-preset.

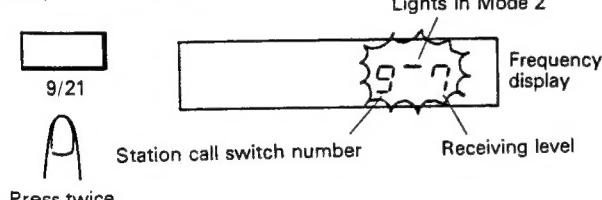
When presetting a station to Mode 1 (e.g. presetting a station to No. 9):

By pressing the station call switch once, the station will be preset to Mode 1.



When presetting a station to Mode 2 (e.g. presetting a station to No. 21):

By pressing the station call switch twice, the station will be preset to Mode 2.



Press twice

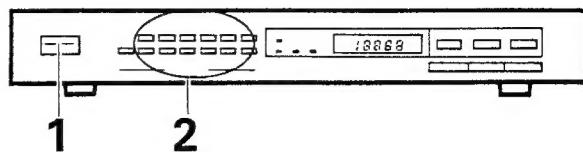
- After you press the STATION CALL switch, the display will flash for about 2 seconds, then the station will be memorized. If you press another switch while the display is flashing, the station will not be memorized.

### STATION CALL switch "memo"

It is recommended that you make a note of the preset stations.

S.C. switch	•	1	2	3	4	5	6	7	8	9	10	11	12
Name of broadcast station													
Frequency													
S.C. switch	••	13	14	15	16	17	18	19	20	21	22	23	24
Name of broadcast station													
Frequency													

### Preset station tuning



- 1 Turn on the power to the tuner and your stereo amplifier.

- 2 Press the STATION CALL switch into which the desired station has been memorized.

- To listen to a Mode 1 broadcast, press the switch once, and to listen to a Mode 2 broadcast, press it twice.
- By pressing the STATION CALL switch, the switch number and receiving level will be displayed, then the frequency will be displayed.

#### NOTE:

If, for example, you wish to receive the station memorized in STATION CALL switch "13" when listening to the station memorized in switch "9", press switch "1/13" twice.

In this way, simple and accurate reception of any desired station is possible.

#### NOTE:

- The contents of the STATION CALL switches will be preserved for several days, even if the tuner's power cord is unplugged.
- If a preset station has been erased, re-preset it.

### Last station memory

- When the POWER switch is pressed to turn power on, the last station received before the power was previously turned off will be received again.
- When power is ON, if the BAND SELECTOR switch is pressed, the last station received before the BAND SELECTOR switch was previously pressed will be received again.

**ENGLISH**

# HINTS FOR BETTER RECEPTION

## EXTERNAL FM ANTENNA

The main advantage of FM over AM is the quality of the broadcast signal. In order to benefit fully from the high signal quality of FM broadcasts, it is recommended that a special-purpose FM antenna be installed. In weak signal areas, a multi-element (3 element, 5 element, 7 element) antenna should be used.

**NOTE:**

*Consult your dealer as to the selection and actual installation of the FM antenna.*

## FM ANTENNA CONNECTIONS

There are two ways of connecting the FM antenna to the antenna input terminals: with a 300-ohm twin-lead feeder or with a 75-ohm coaxial cable. If full justice is to be done to the tuner's performance, a 75-ohm coaxial cable is recommended since it is more immune than the twin-lead feeder to noise and interference from external sources. If an FM antenna has already been erected outdoors, connect it, referring to the figure.

## GROUNDING

Grounding is recommended if reception of FM programs is impaired by noise. To ground, connect a thick polyvinyl wire to the GND terminal and attach the other end to a metal water pipe or grounding bar or wind it around a copper plate and bury it.

**NOTE:**

*Never connect a wire to a gas pipe for grounding since sparks may ignite the gas.*

## OUTDOOR AM ANTENNAS

If it is not possible to obtain adequate AM reception even by changing the orientation of the AM loop antenna, a separate indoor antenna, or an outdoor antenna should be installed.

### INDOOR AM ANTENNA

Use a vinyl insulated wire (5 – 6 m) and connect one end to the AM antenna terminal and affix the other end to the wall or ceiling, as high as possible.

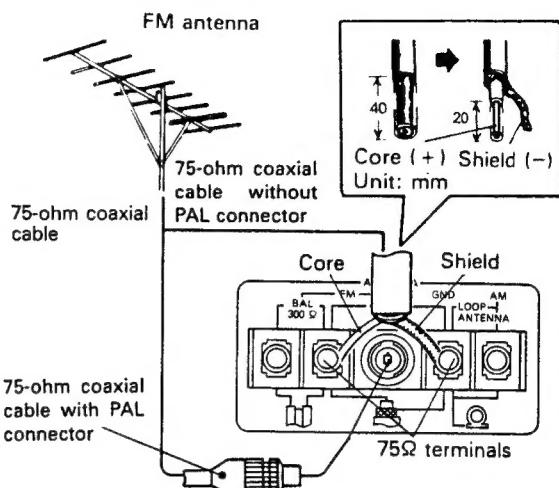
### OUTDOOR AM ANTENNA

If reception quality is not improved sufficiently even when an indoor antenna is used, a vinyl insulated wire should be installed outside and fixed in place.

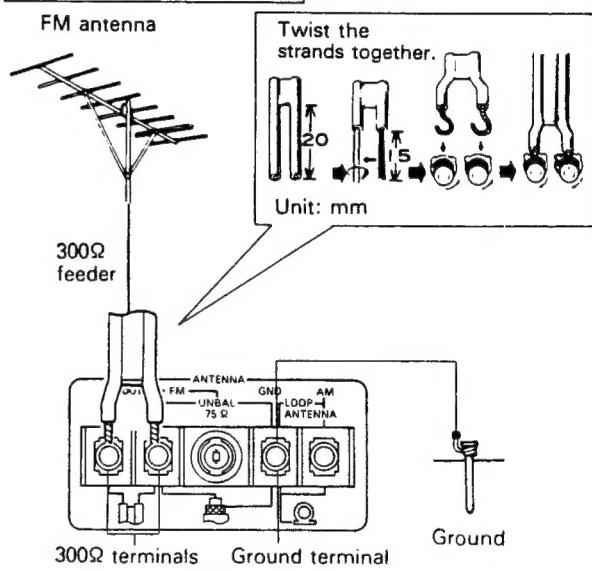
**NOTE:**

*Do not detach the AM loop antenna when using an indoor or an outdoor AM antenna.*

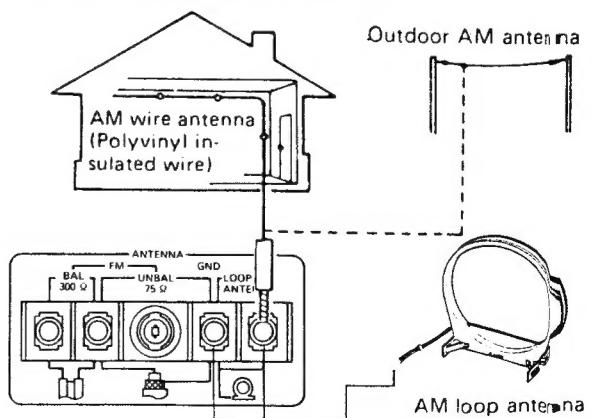
### Connecting the coaxial cable



### Connecting the 300Ω feeder



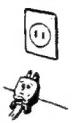
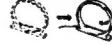
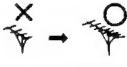
### Connecting the Outdoor AM antenna



# TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.

If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
No power	<ul style="list-style-type: none"> <li>Has the power cord been disconnected?</li> </ul> 	<ul style="list-style-type: none"> <li>Reconnect the power cord.</li> </ul> 
No sound	<ul style="list-style-type: none"> <li>Have any of the output cords been disconnected or incorrectly connected?</li> </ul>  <ul style="list-style-type: none"> <li>Has the antenna been disconnected or is the connection loose?</li> </ul>  <ul style="list-style-type: none"> <li>Has the power cord been unplugged for several days? (Station memory has been lost.)</li> </ul> 	<ul style="list-style-type: none"> <li>Connect them properly to the TUNER terminals on the amplifier.</li> </ul>  <ul style="list-style-type: none"> <li>Connect the antenna properly.</li> </ul>  <ul style="list-style-type: none"> <li>Memorize the preset stations once again.</li> </ul> 
Sound distortion [On the FM band]	<ul style="list-style-type: none"> <li>Are the signals weak and reception poor?</li> </ul>  <ul style="list-style-type: none"> <li>Static from other appliances (particularly automobiles) or multipath reflection (radio waves beamed off mountains and tall buildings and not received directly.)</li> </ul> 	<ul style="list-style-type: none"> <li>Substitute an FM outdoor antenna for the FM T-type antenna.</li> <li>Set the FM MONO switch to ON (reception will be in monaural).</li> </ul>  <ul style="list-style-type: none"> <li>Try varying the height and direction of the antenna or use an FM outdoor antenna substituting a 75-ohm coaxial cable for the standard cable and fixing it as far away as possible from the street.</li> </ul> 
Sound distortion [On the MW or LW band]	<ul style="list-style-type: none"> <li>Is the AM loop antenna oriented poorly or located in an unsatisfactory position?</li> </ul>  <ul style="list-style-type: none"> <li>Static from other electrical appliances (fluorescent lights/motors?)</li> </ul> 	<ul style="list-style-type: none"> <li>Change the direction of the antenna until best reception is obtained as far as possible from tuner.</li> </ul>  <ul style="list-style-type: none"> <li>Switch off other appliances or keep as far away as possible from the tuner when in use.</li> </ul> 
Stereo broadcasts not received in stereo.	<ul style="list-style-type: none"> <li>Are the signals weak, with insufficient input?</li> </ul>	<ul style="list-style-type: none"> <li>Change to an outdoor FM antenna</li> </ul> 
	<ul style="list-style-type: none"> <li>Is the FM MONO switch ON?</li> </ul> 	<ul style="list-style-type: none"> <li>Press the FM MONO switch OFF.</li> </ul> 

# SPECIFICATIONS

## [F-551]

### FM Tuner Section

Frequency range .....	87.5 MHz to 108 MHz
Usable Sensitivity .....	11.2 dBf, IHF (1.0 $\mu$ V/75 $\Omega$ )
50 dB Quieting Sensitivity .....	Stereo; 36.2 dBf, IHF (17.7 $\mu$ V/75 $\Omega$ )
Sensitivity (DIN) .....	Mono; 0.9 $\mu$ V/75 $\Omega$ Stereo; 50 $\mu$ V/75 $\Omega$
Signal-to-Noise Ratio .....	Mono; 75 dB (at 80 dBf) Stereo; 72 dB (at 80 dBf)
Signal-to Noise Ratio (DIN) .....	Mono; 66 dB Stereo; 60 dB
Distortion .....	0.4% (1 kHz)
Alternate Channel Selectivity .....	65 dB (400 kHz)
Stereo Separation .....	40 dB (1 kHz)
Frequency Response .....	30 Hz to 15 kHz
Antenna Input .....	300 $\Omega$ balanced 75 $\Omega$ unbalanced

### AM Tuner Section

Frequency range .....	531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna) .....	300 $\mu$ V/m
Selectivity .....	20 dB
Signal-to-Noise Ratio .....	50 dB
Image Response Ratio .....	40 dB
IF Response Ratio .....	50 dB
Antenna .....	Loop Antenna

### Audio Section

Output	
FM (100% MOD) .....	650 mV
AM (30% MOD) .....	150 mV

### Miscellaneous

Power Requirements .....	a.c. 220 Volts~, 50/60 Hz
Power Consumption .....	10 W
Dimensions .....	420 (W) x 63.5 (H) x 215.8 (D) mm
Weight (without package) .....	2.4 kg

### Furnished Parts

FM T-type Antenna .....	1
AM Loop Antenna .....	1
Connection Cord with Pin Plugs .....	1
Operating Instructions .....	1

#### NOTE:

Specifications and design subject to possible modification without notice due to improvements.

## [F-551L]

### FM Tuner Section

Frequency range .....	87.5 MHz to 108 MHz
Usable Sensitivity .....	11.2 dBf, IHF (1.0 $\mu$ V/75 $\Omega$ )
50 dB Quieting Sensitivity .....	Stereo; 36.2 dBf, IHF (17.7 $\mu$ V/75 $\Omega$ )
Sensitivity (DIN) .....	Mono; 0.9 $\mu$ V/75 $\Omega$ Stereo; 50 $\mu$ V/75 $\Omega$
Signal-to-Noise Ratio .....	Mono; 75 dB (at 80 dBf) Stereo; 72 dB (at 80 dBf)
Signal-to Noise Ratio (DIN) .....	Mono; 66 dB Stereo; 60 dB
Distortion .....	0.4% (1 kHz)
Alternate Channel Selectivity .....	65 dB (400 kHz)
Stereo Separation .....	40 dB (1 kHz)
Frequency Response .....	30 Hz to 15 kHz
Antenna Input .....	300 $\Omega$ balanced 75 $\Omega$ unbalanced

### MW Tuner Section

Frequency range .....	531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna) .....	300 $\mu$ V/m
Selectivity .....	20 dB
Signal-to-Noise Ratio .....	50 dB
Image Response Ratio .....	40 dB
IF Response Ratio .....	50 dB
Antenna .....	Loop Antenna

### LW Tuner Section

Frequency range .....	153 kHz to 281 kHz
Sensitivity (IHF, loop antenna) .....	1,000 $\mu$ V/m
Antenna .....	Loop Antenna

### Audio Section

Output	
FM (100% MOD) .....	650 mV
MW/LW (30% MOD) .....	150 mV

### Miscellaneous

Power Requirements .....	a.c. 220 Volts~, 50/60 Hz
Power Consumption .....	10 W
Dimensions .....	420 (W) x 63.5 (H) x 215.8 (D) mm
Weight (without package) .....	2.4 kg

### Furnished Parts

FM T-type Antenna .....	1
AM Loop Antenna .....	1
Connection Cord with Pin Plugs .....	1
Operating Instructions .....	1

#### NOTE:

Specifications and design subject to possible modification without notice due to improvements.